

WHAT IS CLAIMED IS:

1. A liquid power machine comprising
a drive means,
a drive output means, and
a lever drive assembly by way of which the drive
means and the drive output means are in engagement with
each other.

2. A machine according to claim 1
wherein the drive means includes a hydraulic motor,
a direction converter co-operable with the hydraulic
motor and a conveyor arrangement for lifting liquid from
a lower level to an upper level.

3. A machine according to claim 2
wherein the hydraulic motor includes:
a) a liquid container for containing a liquid with
a buoyancy body accommodated in the liquid container and
adapted to be immersed in the liquid therein,
b) first and second cascade assemblies,
c) means for positively guiding the cascade
assemblies in their opposite directions of movement,
d) a thrust rod connecting the cascade assemblies
to the buoyancy body,
e) an upper liquid container for conveying liquid
to the cascade assemblies and and a lower liquid
container for the discharge of liquid from the cascade
assemblies, and
f) a connecting rod which is movably connected to
the buoyancy body and which is in operative engagement
with the direction converter.

4. A machine according to claim 3
wherein the buoyancy body includes a core of
honeycomb configuration.

5. A machine according to claim 3 including a support and pivotal lever for holding the buoyancy body in guided relationship in the liquid container.

6. A machine according to claim 3 wherein the first cascade assembly and the second cascade assembly each have pivotal containers, and further including a carrier device on which the cascade assemblies are arranged at a vertical spacing from each other and in mutually partially interengaging relationship.

7. A machine according to claim 3 wherein the first cascade assembly has a feed container and the upper liquid container has a through-flow opening adapted to be intermittently opened and closed.

8. A machine according to claim 3 wherein the drive means has a first shaft, and the converter has a drive wheel, a shaft carrying the drive wheel and supported on both sides, means non-rotatably connecting the drive wheel to the free front end of the connecting rod and a driven wheel fixedly connected to the first shaft of the drive means, wherein the drive wheel and the driven wheel are in rotational engagement with each other.

9. A machine according to claim 8 wherein the first shaft is supported at one end non-rotatably in the free front end of the connecting rod and at the other end rotatably in a mounting disc, wherein the mounting disc is rotatably in engagement with the shaft.

10. A machine according to claim 9

wherein the drive wheel and the driven wheel are arranged between the connecting rod and the mounting disc.

11. A machine according to claim 2

wherein the drive means comprises a shaft and the conveyor arrangement includes a conveyor wheel non-rotatably connected to the shaft of the drive means, for conveying liquid from a lower liquid container into an upper liquid container.

12. A machine according to claim 11 wherein the conveyor wheel carries containers arranged in a uniformly distributed relationship at its periphery.

13. A machine according to claim 12

wherein the conveyor arrangement includes control levers operatively connected to respective ones of the containers, and a control plate co-operable with the control levers for pivoting the containers when passing over the upper container.

14. A machine according to claim 1

wherein the drive means has a first shaft and the drive output means has a second shaft which is separate from the first shaft of the drive means, the second shaft being in axial alignment with the first shaft.

15. A machine according to claim 14

wherein the lever drive assembly is arranged between the driven-side end of the first shaft and the drive-side end of the second shaft.

16. A machine according to claim 15

wherein the lever drive assembly comprises a driving portion and a driven portion, wherein the driving portion includes

a) a drive lever fixedly arranged at the driven-side end of the first shaft,

b) a carrier arm with a driver which is supported at both sides and which is fixedly arranged at the free front end of the carrier arm, the carrier arm being in rotational engagement with the drive lever,

c) a mounting disc freely rotatably arranged on the second shaft,

and the driven portion comprises

d) a rotary body fixedly arranged on the drive-side end of the second shaft.

17. A machine according to claim 16

wherein at its free end the drive lever carries a journal which rotatably engages through the carrier arm and having a drive-side end which is rotatably accommodated in the drive lever and a driven-side end which is rotatably accommodated in the mounting disc, wherein the driver has the journal non-rotatably extending therethrough.

18. A machine according to claim 16

wherein the driven portion and the driver are in engagement with each other by means of a tooth arrangement.

19. A machine according to claim 1 including

a carrier device,

a carrier lever mounted to the carrier device,

wherein at its end opposite to the driver the carrier arm is pivotably arranged by means of the carrier lever on the carrier device.

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